



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/808,326	03/14/2001	Gregory L. Hobson	7889	3856
1688	7590	07/01/2005	EXAMINER	
POLSTER, LIEDER, WOODRUFF & LUCCHESI 12412 POWERS COURT DRIVE SUITE 200 ST. LOUIS, MO 63131-3615			DIEP, NHON THANH	
			ART UNIT	PAPER NUMBER
			2613	

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/808,326

Applicant(s)

HOBSON ET AL.

Examiner

Nhon T. Diep

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17, 24-33 and 36-40 is/are pending in the application.
- 4a) Of the above claim(s) 18-23 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-10 and 27 is/are allowed.
- 6) ☒ Claim(s) 1-6, 11-17, 24-26, 28-33 and 36-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 18-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply in the telephone interview on 7/2/2004. Applicant is reminded that the above withdrawn claims need to be cancelled before case can be allowed.

Response to Arguments

2. Applicant's arguments with respect to claims 1-6, 11-17, 24-26, 28-32 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. Claims 1-3, 24-25, 28 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winter et al, in view of Logan et al and further in view of Seeley et al (US 6,069,655) (all are cited by the applicants).

As applied to the 35 USC § 103 rejection as being unpatentable over Winter et al, in view of Logan et al with regard to claims 1-3, 24-25, 28 and 34 of the previous Office Action mailed on 7/2/2005 and with regard to the applicant's newly added limitations of claims 1, 24 and 28 of "each of the video images comprising a plurality of pixel elements" and "the processor configured to compress and store those video images which differ from the reference frame". Seeley et al teaches that each of the video images comprising a plurality of pixel element (col. 12, ln. 58-66) and when the processing performed by processor 30 indicates the presence of an intruder, SCU 12

performs a number of tasks. First, the SCU acquires and stores a full resolution "snapshot" X of the event. That is, the snapshot comprises a full frame of video taken from a camera observing the scene where the intrusion has occurred (col. 12, ln. 58-64). And therefor, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the combination of Winter et al, in view of Logan et al by storing the full frame of video as taught by Seeley et al. Doing so would help security officers to arrest and prosecute intruders and thieves.

With regard to claims 4, 11-17 and 29-33 which were rejected under 35 U.S.C. 103(a) as being unpatentable over Winter et al, in view of Logan, and further in view of Seeley et al in the previous Office Action mailed 7/2/2005. Since Seeley et al further teaches newly added limitations of independent claims 1, 24, and 28, claims 4, 11-17 and 29-33 are also rejected on the same ground as in the previous Office Action.

Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winter et al, in view of Logan, and Seeley et al (all are cited by the applicants), and further in view of Hazra (US 6,414,994). Since Seeley et al further teaches newly added limitations of independent claim 1, claims 5-6 are also rejected on the same ground as in the previous Office Action.

4. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winter et al, in view of Logan et al, and Seeley et al and further in view of Burt et al (US 5, 999, 662). Since Seeley et al further teaches newly added limitations of independent claim 24, claim 26 are also rejected on the same ground as in the previous Office Action.

5. Claims 36-37 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wooten et al 1, in view of Wooten et al 2 (US 5,937,092).

Wootton et al 1 discloses a low false alarm rate detection for a video image processing based security alarm system comprising the same digital video recording system comprises a camera directed at a scene of interest to view the scene and to continuously generate a plurality of video images thereof (fig. 1, el. C1); an image processor configured to compare the video images generated by the camera with previously establish reference image of the scene to identify the occurrence of a change in the scene (col. 6, ln. 55-61); a memory associated with the image processor, the memory configured to store video image data; and wherein the image processor is further configured to select and store the previously established reference video image in the memory (col. 4, ln. 4, ln. 50-52), and wherein the image processor is further configured to store, in the memory, video image data representative of identified changes in the scene (fig. 8 and col. 5, ln. 35-38, 62-65) ; each of the video image is composed of a plurality of pixels, and wherein the video image data representative of identified changes in the scene includes at least on changed block of pixels from a video image together with a reference image associated block map (col. 3, ln. 17-37 and col. 7, ln. 20-65) as specified in claim 36. It is noted that Wooten et al I does not particularly disclose that the reference image associated block map consists of at least one binary representation of a corresponding pixel block comprising a video image, a first binary representation indicating an unchanged pixel block, and a second binary representation indicating a changed pixel block. However, Wootten et al 1 further

Art Unit: 2613

discloses that the method to mask those areas wherein movements within those areas will be disregarded and not sensed as an anomaly requiring processing to determine if a human intruder is present and then Wootten et al 2 teaches "the edge mapping method shows undue dependence on light changes because typical edge masks use absolute differences in pixel values. Light changes can cause new edges to appear, or old ones to disappear, in a binary edge map even through there is no intervening object. And therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Wootten et al 1, by using binary map to mask mask those areas wherein movements within those areas will be disregarded and not sensed as an anomaly requiring processing to determine if a human intruder is present. Doing so would help to simplify the masking process since there are only 2 states and it would be best to use binary map.

With regard to claim 40: Wootton et al 1 also discloses if the motion of an intruder overlap a masked area, the difference from one image to another is identified and further processing, including the normal masked area takes place (col. 5, ln. 35-38). Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made, while processing the difference from one image to another including the normal masked area (areas will be disregarded and not sensed = reference image), to reconstruct the video image of a changed scene by combining both of a masked area and processing the difference from one image to another. Doing so would help to restore important video frames with show possible intruders for later judicial process.

Art Unit: 2613

6. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wootton et al 1, in view of Wooten et al 2 (US 5,937,092) and further in view of Adiletta et al.

As applied to claim 36 above, it is noted that the combination of Wootton et al 1, and Wooten et al 2 does not particularly disclose video image data representative of identified changes is compressed prior to storage. Adiletta et al teaches identified changes between successive frames are calculated and compressed to save bandwidth (col. 11, ln. 30-44). Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Wootton et al, by applying the teaching of Adiletta et al to perform the image analysis. Doing so would help to detect changes between successive images and save storage.

7. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wootton et al 1, in view of Wooten et al 2 (US 5,937,092) and further in view of Dozier et al (US 5,751,346).

As applied to claim 36 above, it is noted that Wootton et al 1, and Wooten et al 2 does not particularly disclose the video image representative of identified changes includes transaction identification information as specified in claim 39. Dozier et al teaches that it is highly desirable in a banking operation to have an image saved which shows the person who made a customer transaction so that at a later time there can be a verification of whether this transaction occurred and an image to verify the identity of the person who made the transaction. And since Wootton et al does want to identify and further process the difference from one image to another. Therefore, it would have

Art Unit: 2613

been obvious to one of ordinary skilled in the art at the time the invention was made, having both of these references for reviewing, would be motivated to modify the system of Wootton et al by recording and saving with an identified changed portions, information indicating a customer transaction so that at a later time there can be a verification of whether this transaction occurred and an image to verify the identity of the person who made the transaction.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhon T. Diep whose telephone number is 571-272-7328. The examiner can normally be reached on m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ND
6/27/2005



NHON DIEP
PRIMARY EXAMINER